

Jarrell, Noble

180897

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From: Ramirez, Delia  
Sent: Tuesday, February 28, 2006 4:44 PM  
To: Jarrell, Noble  
Subject: 10/602219

Hi,

I would like to request the following alignments:

1. SEQ ID NO:11 against SEQ ID NO:1 of 07/602824
2. SEQ ID NO:11 against EMBL accession number X05790 GI 28535
3. SEQ ID NO:12 against SEQ ID NO:1 of 07/602824
4. SEQ ID NO:12 against EMBL accession number X05790 GI 28535

Thank you very much,

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Delia M. Ramirez, Ph.D.  
Patent Examiner  
Recombinant Enzymes-Art Unit 1652  
USPTO  
400 Dulany Street, Remsen Bldg., 2D74, Mail room 2C70  
Alexandria, VA 22314  
(571) 272-0938  
delia.ramirez@uspto.gov

Noble  
Fm 3/11/06  
10 ONL  
SPR  
1AA  
3NA  
GCG  
IG

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Sequence 1, Application US/07602624A  
 / Patent No. 5356804  
 / GENERAL INFORMATION:  
 / APPLICANT: Denick, Robert J.  
 / BISHOP, David F.  
 / APPLICANT: Ioannou, Yiannis A.  
 / TITLE OF INVENTION: CLONING AND EXPRESSION OF BIOLOGICALLY  
 / ACTIVE alpha-GALACTOSIDASE A  
 / NUMBER OF SEQUENCES: 13  
 / CORRESPONDENCE ADDRESS:  
 / ADDRESSEES: PENNIE & EDMONDS  
 / STREET: 1155 Avenue of the Americas  
 / CITY: New York  
 / STATE: New York  
 / COUNTRY: U.S.A.  
 / ZIP: 10036  
 / COMPUTER READABLE FORM:  
 / MEDIUM TYPE: Floppy disk  
 / COMPUTER: IBM PC compatible  
 / OPERATING SYSTEM: PC-DOS/MS-DOS  
 / SOFTWARE: PatentIn Release #1.0, Version #1.25  
 / CURRENT APPLICATION DATA:  
 / APPLICATION NUMBER: US/07/602,824A  
 / FILING DATE: 24-OCT-1990  
 / CLASSIFICATION: 435  
 / ATTORNEY/AGENT INFORMATION:  
 / NAME: Coruzzi, Laura A.  
 / REGISTRATION NUMBER: 30,742  
 / REFERENCE/DOCKET NUMBER: 6923-005  
 / TELECOMMUNICATION INFORMATION:  
 / TELEPHONE: (212) 790-3090  
 / TELEFAX: (212) 669-8864/9741  
 / TELEX: 66141 PENNIE  
 / INFORMATION FOR SEQ ID NO: 1:  
 / SEQUENCE CHARACTERISTICS:  
 / LENGTH: 1393 base pairs  
 / TYPE: nucleic acid  
 / STRANDEDNESS: double  
 / TOPOLOGY: unknown  
 / MOLECULE TYPE: cDNA  
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 VERSION X05790.1 GI:28535  
 KEYWORDS alpha-galactosidase; galactosidase; glycoprotein; signal peptide.  
 SOURCE Homo sapiens (human)  
 ORGANISM Homo sapiens  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;  
 Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.  
 1 (bases 1 to 1319)  
 REFERENCE Truji,S., Martin,B.M., Kaslow,D.C., Migeon,B.R., Choudary,P.V.,  
 Stubblefield,B.K., Mayor,J.A., Murray,G.J., Barranger,J.A. and  
 Gians,E.I.  
 TITLE Signal sequence and DNA-mediated expression of human lysosomal  
 alpha-galactosidase A  
 JOURNAL Eur. J. Biochem. 165 (2), 275-280 (1987)  
 MEDLINE 87246603  
 PUBMED 3036505  
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 101 CCCCTGGCT AGACCACTG ACATGGATT GCAAGGAGC CCTACCATGG  
 151 GCTGGCTGCA CTGGGAGGCC TTATGTGCA ACCTTGACTG CCAGGAAGC  
 201 CCAATTCCCT GCATCAGTGA GAAAGCTCTC ATGGAGATGG CAGAGCTCAT  
 251 GGTCTCAGAA GGCTGGAAAG ATCCAGETTA TGAATGACTC TGCAATTGATG

301 ACTGTTGGAT GGCTCCCCAA AGAGATTOAG AAGGCAAGACT TCAGGAGAC  
 351 CCTCAGCGCT TTCTCTCATG GATTGCGAG CTAGCTATT ATGTTACAG  
 401 CAAAGACTG AAGCTAGGA TTATGAGA TGTTGAAAT AAAACCTGCG  
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 501 GCTGACTGGG GAGTAGATC GTAAAAATT GATGGTTGTT ACTGAGACG  
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OM protein - nucleic search, using frame\_plus\_p2n model

Run on: March 1, 2006, 07:53:21 ; Search time 1 Seconds  
(without alignments)

2.284 Million cell updates/sec

Title: US-10-602-219-12

Perfect score: 2314

Sequence: 1 MQLRNPEHLIGCALALRFLA.....RURSHINPTGTULLQLENTM 421

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Ygapop 10.0 , Ygapext 0.5  
Fgapop 6.0 , Fgapext 7.0  
Delop 6.0 , Delext 7.0

Searched: 2 seqs, 2712 residues

Total number of hits satisfying chosen parameters: 4

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 2 summaries

Command line parameters:

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-OUTFMT=+p0 -P0= -NO_XLPPX -NEG SCORES=0 -LONGLOG -PThreads=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
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2: ./home/njarrell/ram219/ram219/x05790.gb\_pr.seq,\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Query	Match	Length	DB	ID	Description
1	2314	100.0	1319	2	HSAGALAR	ACCBSESSION:X05790
2	2314	100.0	1393	1	US-07-602-824A-1	Sequence 1, Appli

ALIGNMENTS

RESULT	HSAGALAR	Human mRNA for alpha-galactosidase A (EC 3.2.1-22)	1319 bp mRNA linear	PRI 30-MAR-1995
DEFINITION				
ACCESSION	X05790			
VERSION	X05790.1			
KEYWORDS	GI:28535			
SOURCE	Alpha-galactosidase; galactosidase; glycoprotein; signal peptide.			
ORGANISM	Homo sapiens (human)			
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Bivalvia; Eutheria; Primates; Catarrhini; Hominidae; Homo.				
REFERENCE	1 (bases 1 to 1319)			
AUTHORS	Tauji, S., Martin, B.M., Kaslow, D.C., Migeon, B.R., Choudary, P.V.,			

Stubblefield, B.K., Mayor, J.A., Murray, G.J., Barranger, J.A. and Gibbs, E.I.

Signal sequence and DNA-mediated expression of human lysosomal alpha-galactosidase A

Eur. J. Biochem. 165 (2), 275-280 (1987)

JOURNAL 87246603  
MEDLINE 3036505  
PUBMED 3036505

FEATURES

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Pred. No. :	Score:	Length:
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Best Local Similarity:	100.0%	Mismatches:
Query Match:	100.0%	Indels:
DB:	2	Gaps:

US-10-602-219-12 (1-421) x HSAGALAR (1-1319)

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QY 41 ThrMetGlyItpLeuItpProGlyAsnLeuAspCysGlnGluGluPro 60

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181	AlaAspGlyLysTrpLysBisMetSerLeuAlaLeuAsnArgGlyArgSerIleValTyr	200
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261	GlyTTGAsnAProAspMetLeuValIleGlyLeuSerTrpIysGlnGln	280
804	GTTGGATGCCCCGATATGGTACATGGCAACTTGGCTCTACCTGGATATGCCAA	863
281	ValIthrGlnMetAlaLeuTrpAlaIleMetAlaAlaProLeuPheMetSerAsnAspLeu	300
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RESULT 2  
US-07-602-824A-1

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 Db 1321 ATG 1323

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GenCore version 5.1.7  
(c) 1993 - 2006 Bioceleration Ltd.

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(without alignments)

3.433 Million cell updates/sec

Title: US-10-602-219-11

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Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing First 2 summaries

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2: /home/njarrell/ram219/x05790.gb\_pr.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Query	Match	Length	DB	ID	Description
-----						
1	1261.8	99.7	1319	2	HSAGALAR	ACCESSION X05790
2	1261.8	99.7	1393	1	US-07-602-824A-1	Sequence 1, Appli

## ALIGNMENTS

RESULT 1	HSAGALAR	1319 bp	mRNA	linear	PRI 30-MAR-1995
DEFINITION	Human mRNA for alpha-galactosidase A (EC 3.2.1-22).				
ACCESSION	X05790				
VERSION	X05790.1				
KEYWORDS	GI:28535				
SOURCE	alpha-galactosidase; galactosidase; glycoprotein; signal peptide.				
ORGANISM	Homo sapiens				
	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteostomi;				
	Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.				
REFERENCE	1 (bases 1 to 1319)				
AUTHORS	Tsuiji, S.; Martin, B.M.; Kaslow, D.C.; Migeon, B.R.; Choudary, P.V.; Stubblefield, B.K.; Mayor, J.A.; Murray, G.J.; Barranger, J.A. and				
	Gins, E.I.				
TITLE	Signal sequence and DNA-mediated expression of human lysosomal alpha-galactosidase A				
JOURNAL	Eur. J. Biochem. 165 (2), 275-280 (1987)				
MEDLINE	87246603				
PubMed	3046505				
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CDS

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sig\_peptide

/note="signal peptide (A -31 to -1)"

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/product="alpha-galactosidase (AA 1-398)"

438..440

/note="pot-N-linked glycosylation site"

597..599

/note="pot-N-linked glycosylation site"

666..668

/note="pot-N-linked glycosylation site"

1245..1247

/note="pot-N-linked glycosylation site"

1278..1283

/note="put-polyA signal"

1295..1300

/note="put-polyA signal"

Query Match 99.7%; Score 1261.8; DB 2; Length 1319;

Best Local Similarity 99.8%; Pred. No. 0;

Matches 1263; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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Db 24 ATGAGCTGAGGAACCAAGACTACATCGGCTTCGCGCTTCGCTTCCTGGCC 83

Qy 61 CTCGTTCTGGGACATCCCTGGGCTAGGACTGACAATGGATTCGCAAGGA 120

Db 84 CTCGTTCTGGGACATCCCTGGGCTAGGACTGACAATGGATTCGCAAGGA 143

Qy 121 ACCATGGCTGCTGCTGCACTGGGCTCATGGCAACCTTGACTGCCAGGA 180

Db 144 ACCATGGCTGCTGCACTGGGCTCATGGCAACCTTGACTGCCAGGA 203

Qy 181 GATTCTGCTCATCGTAGAGCTTCATGGAGCTTCATGGCTTCAGAGGC 240

Db 204 GATTCTGCTCATCGTAGAGCTTCATGGAGCTTCATGGCTTCAGAGGC 263

Qy 241 TGGAGGATGCGAGTTATGGTACCTCTGCTATGGATTCGCTTCAGGCTA 300

Db 264 TGGAGGATGCGAGTTATGGTACCTCTGCTATGGATTCGCTTCAGGCTA 323

Qy 301 GATTCAAGGGAGACTTCAGGCAGCCCTAGGCTTCATGGATTCGCTTCAGGCTA 360

Db 324 GATTCAAGGGAGACTTCAGGCAGCCCTAGGCTTCATGGATTCGCTTCAGGCTA 383

Qy 361 GCTTAATGTTTCAGCAAAAGGACTGAGCTTGGATTATGGATTCGAAATAAA 420

Db 384 GCTTAATGTTTCAGCAAAAGGACTGAGCTTGGATTATGGATTCGAAATAAA 443

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 864 GAACTCAGATGGCCCTCTGGCTATCATGCTGCTCTTATTCATGCTTAATGACCTC 923  
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RESULT 2  
 US-07-602-824A.1  
 / Sequence 1, Application US/07602824A  
 / Patent No. 556804  
 / GENERAL INFORMATION:  
 / APPLICANT: Desnick, Robert J.  
 / APPLICANT: Bishop, David F.  
 / APPLICANT: Ioinou, Yiamnis A.  
 / TITLE OF INVENTION: CLONING AND EXPRESSION OF BIOLOGICALLY  
 / NUMBER OF SEQUENCES: 13  
 / CORRESPONDENCE ADDRESS:  
 / ADDRESS: PENNIE & EDMONDS  
 / STREET: 1155 Avenue of the Americas  
 / CITY: New York  
 / STATE: New York  
 / COUNTRY: U.S.A.  
 / ZIP: 10036

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 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.25  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/07/602,824A  
 FILING DATE: 24-OCT-1990  
 CLASSIFICATION: 435  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Coruzzi, Laura A.  
 REGISTRATION NUMBER: 30,742  
 REFERENCE/DOCKET NUMBER: 6923-005  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (212) 869-9864/3741  
 TELEFAX: (212) 869-9864/3741  
 INFORMATION FOR SEQ ID NO: 1:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 1393 base pairs  
 STRANDEDNESS: double  
 TOPOLOGY: unknown  
 MOLECULE TYPE: cDNA  
 FEATURE:  
 NAME/KEY: CDS  
 LOCATION: 61..1350  
 US-07-602-824A.1  
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 Best Local Similarity 99.8%; Pred. No. 0; Mismatches 0; Gaps 0;  
 Matches 1263; Conservative 0; Indels 0; Gaps 0;  
 1 ATGCGACTGGAGAACCCAGAACTCATCTGGCTGGCTGGCTGGCTGGCTGGCC 60  
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